APPENDIX B

APPENDIX B

Vegetation Coverage Evaluation

STANDARD OPERATING PROCEDURE FOR VEGETATION COVER MEASUREMENT

1.0 INTRODUCTION

This Standard Operating Procedure (SOP) describes the protocols to be followed while conducting measurements of vegetative cover. The procedures presented herein are intended to be of general use. As the site work progresses, and if warranted, appropriate revisions will be made and approved in writing by the Project Manager.

2.0 VEGETATION COVER MEASUREMENTS

2.1 SITE LAYOUT

This section applies to the general layout and adaptation of the actual site for conducting vegetation cover measurements. Vegetation cover measurements will be conducted only on areas of interest larger than ¼ acre. The outline of the barrier or revegetation area identified for cover measurements will be mapped and the area divided into ½-acre subareas. One measurement transect will be randomly located in the approximate center of each subarea.

2.2 DATA COLLECTION

The vegetative cover will be determined using the point-intercept method (Bonham, C.D. 1989. Measurements for Terrestrial Vegetation. John Wiley & Sons, NY. 338 p.). The basic premise of the point-intercept method is that plant cover within a given area can be determined by recording the number of points that actually hit plants if an infinite number of points are placed in a two-dimensional area. The point-intercept method consists of extending a transect line a predetermined distance through a vegetated area judged to represent the given community type or seeded area. The type of material (e.g., vegetation biomass, soil, rock, etc.) is recorded at each assigned point, or intercept, along the transect line. The total number of vegetative "hits" is divided by the total possible hits to obtain the percent vegetative cover.

Vegetative cover measurements will be taken using 2 transects per acre in revegetated areas. Each transect will be 50 meters long and will be randomly placed. The type of material observed under each 1 meter interval of the transect will be recorded. Thus 100 points per acre will be recorded.

3.0 DOCUMENTATION

3.1 DAILY FIELD RECORD

An experienced field representative will document the activities of each day of field work chronologically in accordance with the procedures contained in the QA/QC Plan. Entries in the field log book will include:

A. Mapped outline of the barrier/revegetation area of interest (larger than ¼-acre), including ½-acre divisions;

B. Location and length of each transect, along with sampling interval length;

C. General observations of plant cover throughout the barrier/revegetation area, relative to the transect sampling area; and

D. Percent cover calculation for the barrier/revegetation area.

3.2 PERCENT COVER CALCULATIONS

Percent vegetative cover will be determined for each barrier/revegetation area by the following procedure:

A. For each transect, sum the vegetative "hits" to develop a total number of hits per transect. Also, sum the number of observations (i.e., potential hits) per transect.

B. For all transects combined, divide the grand total of hits by the grand total of observations (potential hits) and multiply by 100 to obtain the percent vegetative cover for the barrier/revegetation area.